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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,706	11/24/2003	Manabu Sawasaki	1324.66570	5369

7590 06/26/2007
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EXAMINER

NGUYEN, DUNG T

ART UNIT	PAPER NUMBER
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2871

MAIL DATE	DELIVERY MODE
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06/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,706

Applicant(s)

MANABU SAWASAKI

Examiner

Dung Nguyen

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23,25-28 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23,25-28 and 31-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/2/07;4/12/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/16/2007 has been entered.
2. Applicant's amendment dated 04/16/2007 has been received and entered. By the amendment, claims 23, 25-28, 31-38 and newly added claim 39 are now pending in the application.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 23, 28, 31-32, 34 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurauchi et al., US Patent No. 6,323,921.

The above claims are anticipated by Kurauchi et al. figures 2, 4A and 5C which disclose a liquid crystal display (LCD) device (figures 2, 4A, 5C) comprising:

- . a thin film transistor (TFT) substrate having a substrate (22) with resin color filters (8c) and a pixel electrode (28) (see figure 5C);
- . a common electrode substrate having a second substrate (2) having a common electrode (not shown);

- . a liquid crystal layer (between two substrates);
- . a columnar spacer (9c), wherein the columnar spacer includes the resin color filter (e.g., 6c, 7c having a same width and 8d) that contacts to the liquid crystal layer (see figure 5C).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurauchi et al., US Patent No. 6,323,921, in view of Kadota et al., US Patent 5,818,550.

Regarding the above claims, Kurauchi disclose the claimed invention as described above except for the thickness of the second substrate. Kadota et al. do disclose the second substrate (12) can be thinner than the first substrate (0). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to form an upper surface (display side) thin and light in order to reduce side and birefringence on an LCD display side.

7. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurauchi et al., US Patent No. 6,323,921, in view of Kurematsu et al., US Patent No. 5,764,318.

Regarding the above claims, Kurauchi disclose the claimed invention as described above except for the common substrate being of alkaline glass. Kurematsu et al. disclose an alkaline glass can be formed in an LCD device (col. 2, ln 64-67 and col. 3, ln 1-3). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ an alkaline substrate as shown by Kurematsu et al. for cost efficiency (Id.).

Response to Arguments

8. Applicant's arguments filed 04/16/2007 have been fully considered but they are not persuasive.

Applicant's only argument is that Kurauchi fails to disclose or suggest a columnar spacer formed with laminated resin layer that includes a resin color filter layer and contacts with a liquid crystal layer. The Examiner is not convinced by this argument since the same is true of the Kurauchi et al. columnar spacer as clearly shown in the Kurauchi et al. figure 5C, wherein the color layers (6c, 7c and 8d) can be served as the component of a spacer portion (9c) as claimed.

Accordingly, the rejection of the above claims stand.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN
06/25/2007

/Dung Nguyen/
Dung Nguyen
Primary Examiner
Art Unit 2871